MICRO BL-10X

《OPERATING MANUAL》

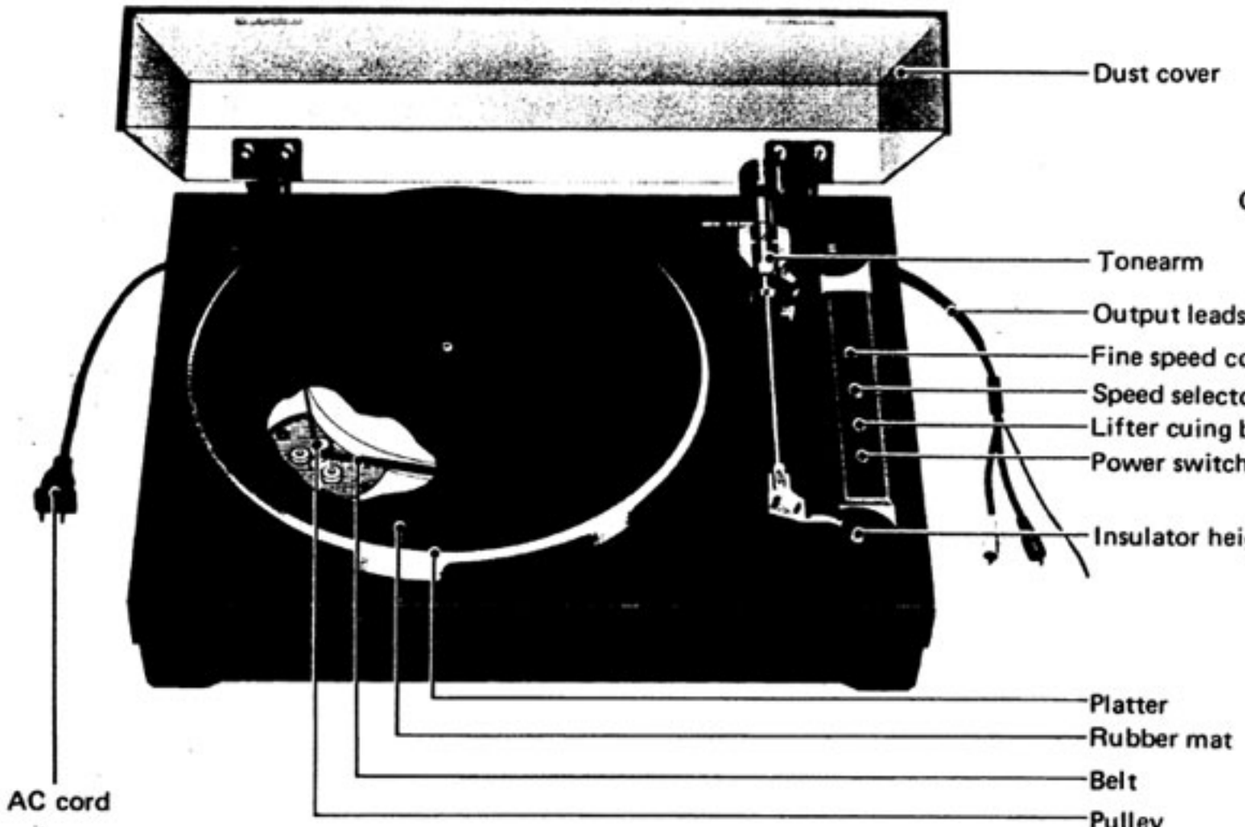


Photo.1

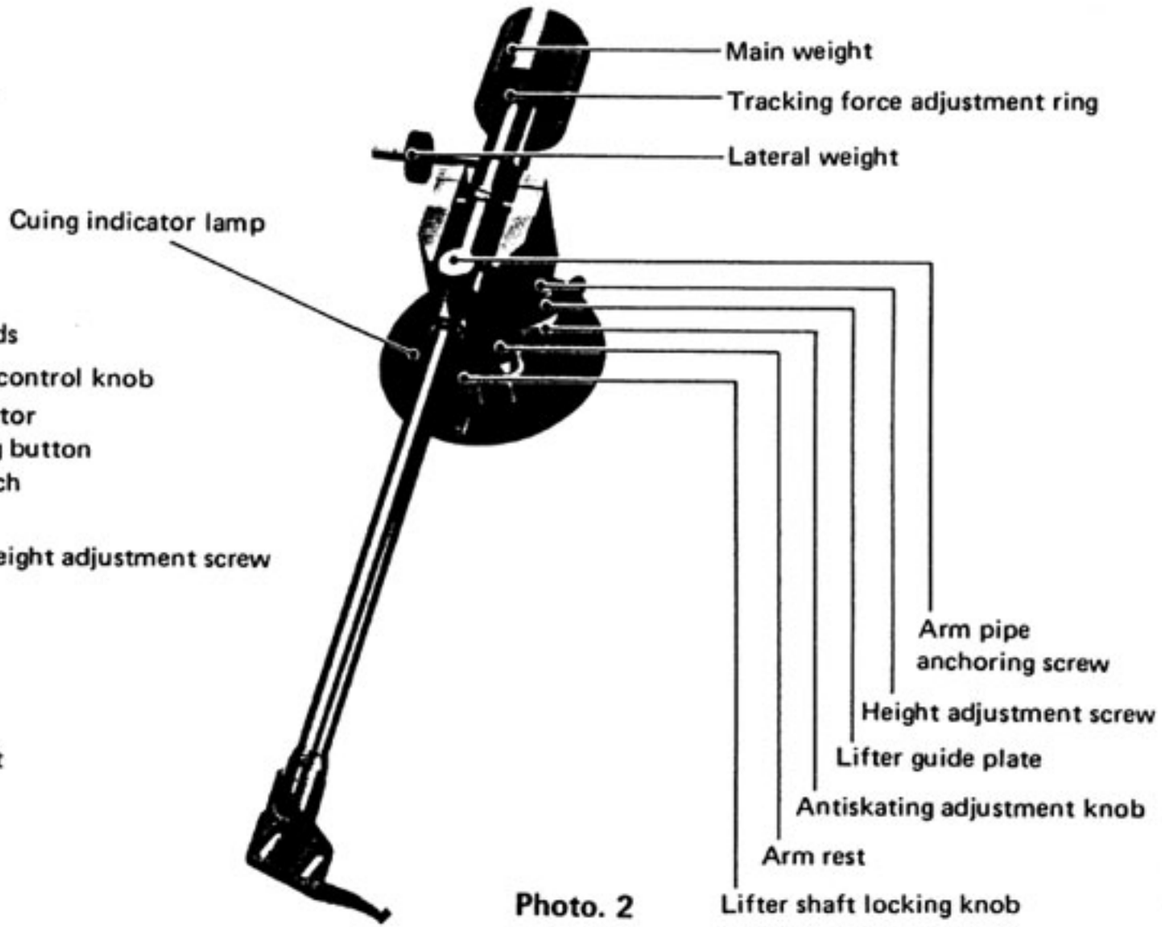
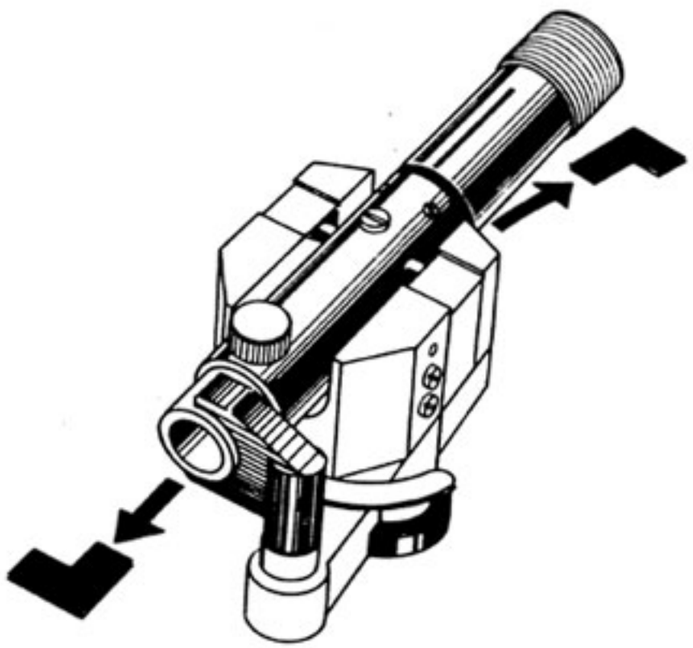


Photo. 2

• Accessories

- Platter with belt
- Rubber mat
- Strobo sheet
- Main weight
- Lateral weight, small
- 45 rpm adapter
- Screwdriver, large
- Screwdriver, small
- Hexagon wrench

Note: Tonearm is provided with a spacer on its pipe lower surface to protect the knife-edge from impairments during transit. Pull it off in the direction of the arrow when assembling.



• Installing the Platter

1. Confirm that the belt is properly set on the drive surface in the platter. Pull a part of the ribbon out of the hole (Fig. 1) and fit the platter to the shaft.
2. Find the pulley position by manually turning the platter with the ribbon end held between fingers.
3. Set the belt on the pulley by pulling the ribbon with fingers.
4. Turn the platter slightly and remove the ribbon from the belt.
5. Manually turn the platter several times and confirm whether the belt is properly on the pulley by watching through the finger hole.

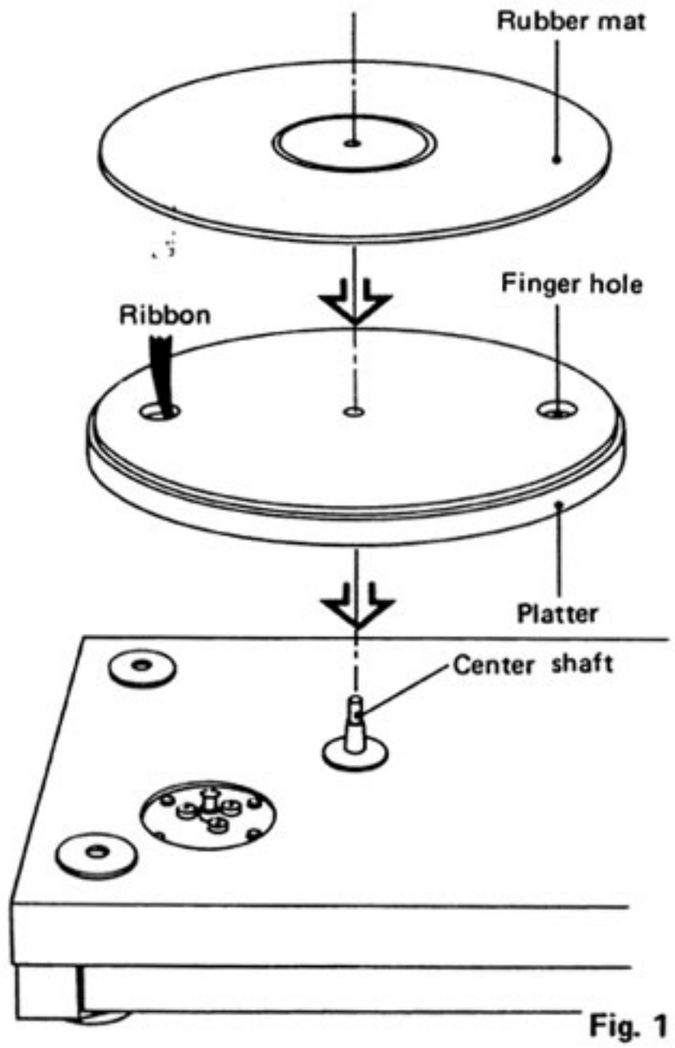


Fig. 1

• Assembling and Adjusting the Tonearm

• Mounting the cartridge

The model BL-10X does not come with a phono-cartridge and so mount the cartridge, as shown in the figure, to the headshell integrated with the pipe (accessory) using screws with a length corresponding to the cartridge.

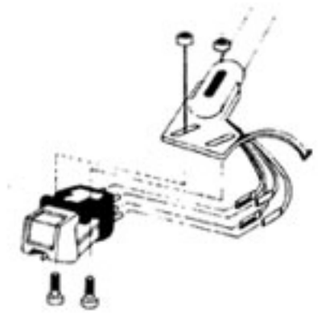


Fig. 2

• Connecting the cartridge

Connect the headshell's leads to the cartridge using tweezers. Perform these connections correctly; otherwise there may be no sound or a humming sound will be generated. The color coding of the leads is as below. (Fig. 3)

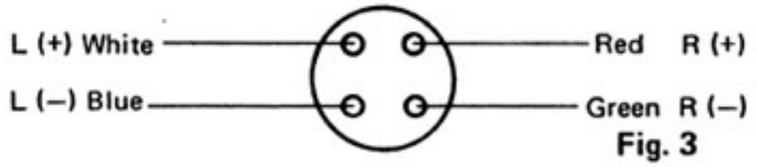


Fig. 3

• Adjusting the overhang

(1) With straight pipe

Adjust by visual means the length on the center line of the arm pipe extending from the tip of the headshell to the stylus tip of the cartridge so that it is made 2 mm. A deviation of about 1 mm will not affect the tonearm movement or sound quality in any way. Make sure that the center line of the cartridge and the long holes of the headshell are made parallel.

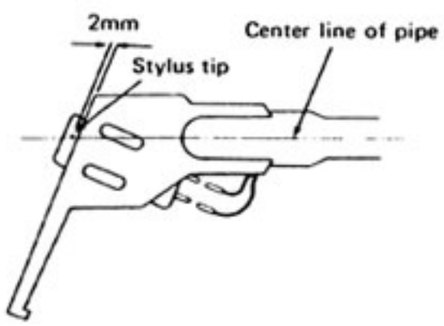


Fig. 4

(2) With S-shaped pipe (Option)

Attach the accessory overhang gauge and set the cartridge so that the stylus tip is positioned at the gauge's " ⧗ " mark.

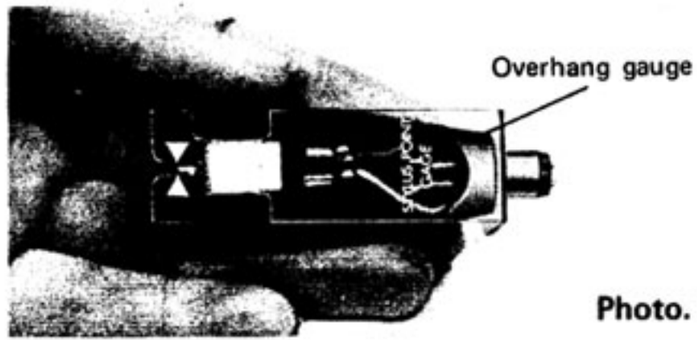


Photo. 3

• Assembling the tonearm

Mount the arm pipe onto the arm itself and rotate the arm pipe anchoring screw to secure. Make sure that no unnecessary force is applied to the arm bearing section while you are doing this. Also ensure that no foreign matter is allowed to penetrate the connector parts. (Photo 4)

Photo. 4

Slide the main weight onto the rear of the arm pipe by rotating it in the direction of the arrow. (Photo 5)

Photo. 5

• With S-shaped pipe (Option)

Fit the headshell (with cartridge) onto the end of the arm as in the photo and then rotate the locking collar to anchor it. Make sure no unnecessary force is applied to the arm bearing section while you are doing this. (Photo 6)

Photo. 6

• Adjusting the horizontal balance

BL-10X incorporates a static-balance type tonearm, which offers a proper stylus pressure by properly maintaining the horizontal balance when the cartridge is mounted. In the case of a tonearm whose cartridge stylus cover can be detached, the cover should be detached when maintaining proper horizontal balance.

(1) Depress the power switch to confirm that the lifter is lowered. After the confirmation switch the power off (see turntable operation).
(2) Fit the lateral weight into the lateral shaft and temporarily fix it there.
(3) Set the antiskating indicator to Zero.
(4) Detach the tonearm from the arm rest.
(5) Lift the arm rest slightly and turn it towards yourself.

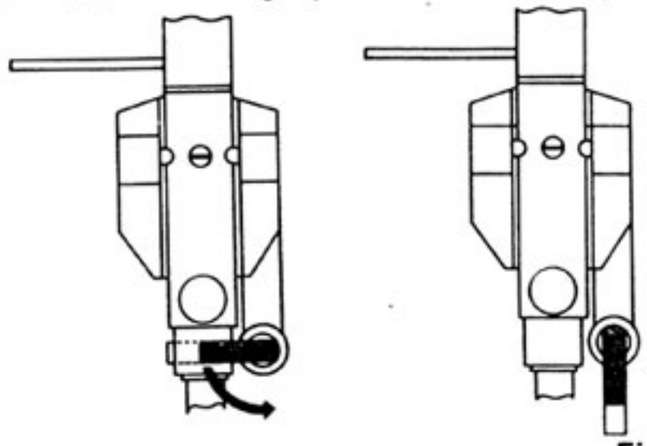


Fig. 5

(6) Supporting the headshell and counter weight as shown in photo 7, turn the counter weight, moving it backward or forward, until the proper balance is achieved.

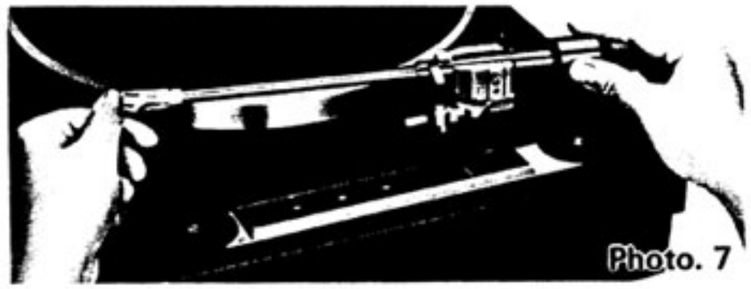


Photo. 7

The horizontal balance means that when the tonearm is released, the cartridge end and main weight end will be properly balanced, as shown in Fig. 6. In Fig. 7 the main weight is too heavy and so it should be rotated to the right in the direction of the arrow. In Fig. 8 the cartridge is too heavy and so the main weight should be rotated to the left in the direction of the arrow. Repeatedly perform this adjustment so that the tonearm is balanced horizontally as in Fig. 6.

Fig. 6

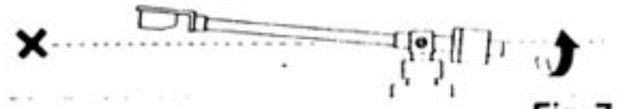


Fig. 7

Fig. 8

• Compatible cartridge weight

Straight pipe

Weight used	Compatible cartridge weight
Straight standard weight (accessory to main unit)	4～9 g
Above weight +SW-10XA, optional sub-weight	10～14.5 g

S-shaped pipe (Option)

Weight used	Compatible cartridge weight (including head0 shell)
S-shaped standard weight (accessory to main unit)	12.5～20 g
S-shaped standard weight + SW-10XA, optional sub-weight	20～27 g
S-shaped standard weight + SW-10XB, optional sub-weight for old Ortofon SPU-series MC cartridges, pre-mounted with heavy Zn headshell.	27～32 g

• Using the optional sub-weight

Depending upon your cartridge weight, it is required to provide the cartridge with a sub-weight. While normally the main weight (accessory) taking care of operation of the cartridge whose weight is upto 4—9g, the operation of the cartridge weighing over 10g will require a sub-weight (option). The sub-weight is equipped in such a way that the main weight is removed from the tonearm and then the sub-weight is screwed into the tonearm rear in the direction of the arrow. When it has completely been screwed, fit the main weight as shown in Photo 5. Adjust the horizontal balance by turning the main weight, taking the cartridge weight into consideration.

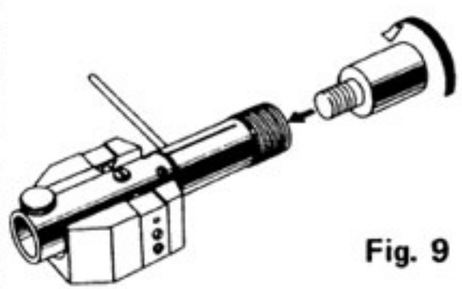


Fig. 9

• Adjusting the lateral balance

In the case of knife-edge type tonearm with which BL-10X is provided, unless weight balance is maintained between the right and the left of the knife-edge, no favourable performance and tone quality will be assured. It means that the lateral balance is necessary. Lifting the rear end of the turntable a little causes the tonearm to shift in either way unless lateral balance is attained (Photo 8). Adjust the arm so that it may stand still by sliding the lateral weight in the direction the tonearm shifts. In the case of using a S-shaped pipe (option), large lateral weight should be applied. When the lateral balance is attained, restore the arm rest to the original position and set the tonearm on the arm rest.

Photo 8

Fig. 10

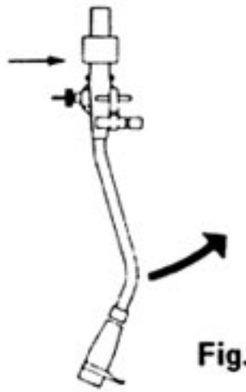


Fig. 11

• Adjusting the tracking force

After balancing the tonearm, return it to the arm rest and raise the arm lifter. Turn only the tracking force adjustment ring and set the reference line to zero. In this case, caution is recommended to keep the main weight in standstill, because unstable main weight will break the horizontal balance.

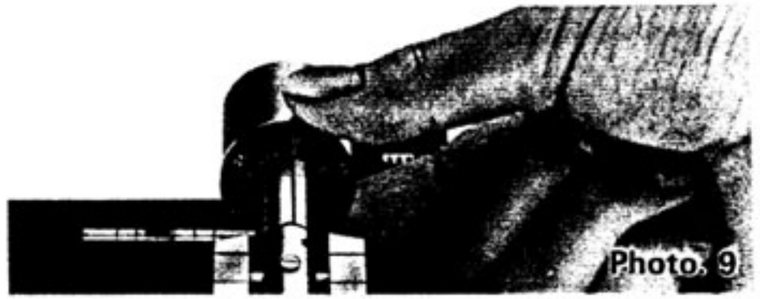


Photo. 9

Next, turn the rear part of the main weight in the direction of the arrow so that the tracking force reference line is aligned with the used cartridge stylus pressure, such as 1.5 scale indication for 1.5 grams recommended cartridge.

Photo. 10

• Adjusting the antiskating

Antiskating device serves to apply the uniform pressure (stylus pressure) on both sides of the record groove by cancelling the force arising from the record turn and pulling the tonearm to the inner side during play.
The scale has been designed to match the tracking force, i.e., if you are tracking at 1.5 grams, put the antiskating indicator on 1.5. (Photo 11)

Photo 11

Adjustment of tonearm horizontal balance, stylus pressure, lateral balance and antiskating should be conducted always in replacing the cartridge. Poor adjustment is responsible for abnormal wear on the stylus point, torsion in tone quality, difference in volume level between the right and left, deteriorated stroke, etc.

• Tonearm height adjustment

BL-10X is so designed as to allow the height adjustment shaft to move upwards automatically by the aid of a spring when the lifter shaft locking knob is loosened.
Consequently adjust the tonearm height and lifter height by the following procedures:

(1) Loosen the lifter shaft locking knob.
(2) Loosen the height adjustment screw by the use of hexagon wrench (accessory) and lower the tonearm. When loosening the height adjustment screw, hold the tonearm securely with fingers so that it may not drop (Photo 12).
(3) Tighten the lifter shaft locking knob in this position.
(4) Place a record on the platter and move the tonearm to a place over the record groove.
(5) Adjust so that the tonearm is parallel to the record.

(Fig. 12)

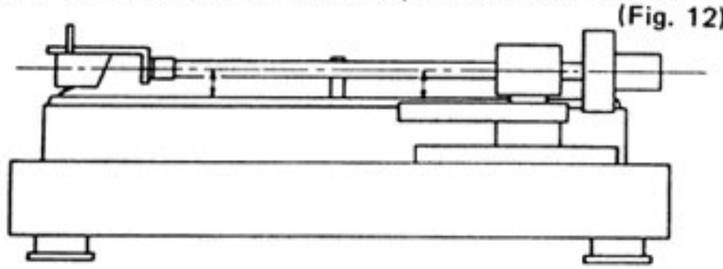


Fig. 12.

(6) After the tonearm height adjustment, bring the lifter to an elevated position (see turntable operation).
(7) Put the tonearm on to the record, holding it with fingers in such a way that the stylus point is 5 — 10 mm above the record surface.
(8) Loosen the lifter shaft locking knob. Height adjustment shaft will rise upwards until it strikes the guide plate and stops. Here, securely tighten the locking knob. Operation procedures described in Item (1) and (3) will not be required in shifting the tonearm height from low to high.

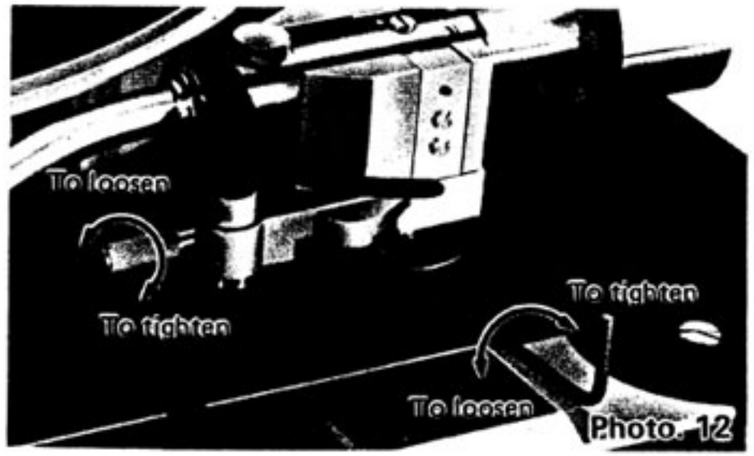


Photo. 12

• Installing the Dust Cover

Insert the dust cover into the brackets provided on the rear of the turntable in the direction of the arrow.
(Photo 13)

Photo. 13

• Insulator height adjustment

The insulator is adjusted in plant to provide horizontality. In the case of applying a heavy accessory, e.g. stabilizer, etc., it is necessary to adjust the height of the insulator for attaining horizontality. Turn it with a screw driver (accessory) as shown in Photo 14 and adjust the insulator height.

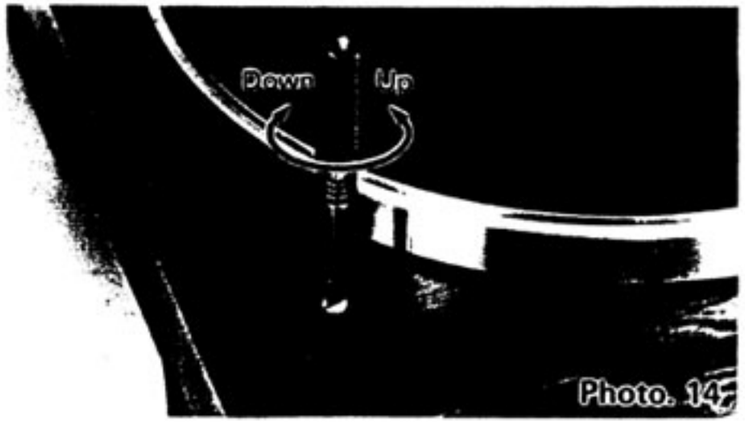


Photo. 14

• Installing the turntable system

(1) If the turntable is installed near the amplifier or near a piece of equipment using a transformer, its performance will be adversely affected by the magnetic flux leakage and this may cause hum. In particular, remember that MC (moving coil) cartridges are susceptible to flux and that the amplifier should be installed as far away from the turntable as possible.

(2) Turntables do not take kindly to vibration. Do not install the BL-10X, therefore, in front of a speaker (where it will be in the direct path of the sound waves), or on top of a speaker, and keep it as far as away from a wall as possible.

(3) Do not install the turntable at an angle. Select an installation location which is perfectly flat.

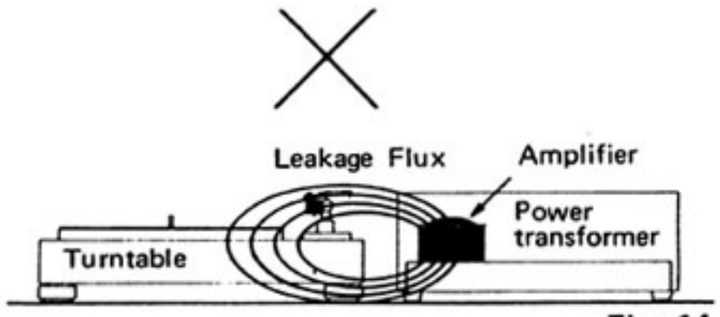


Fig. 14

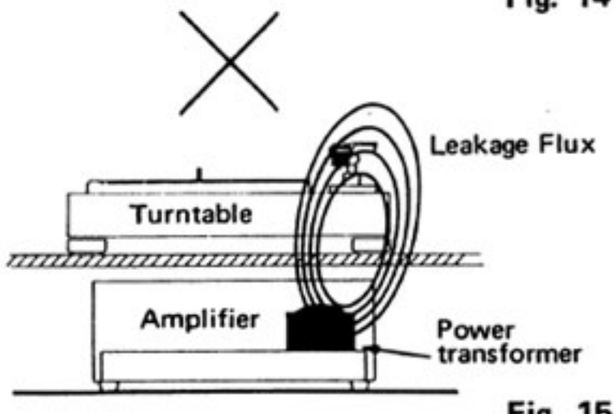


Fig. 15

• Specifications

• BL-10X

* Turntable

Drive system	Belt drive with FG-servo controlled DC motor
Speed	33-1/3, 45 rpm
Speed variable range	±3%
Wow/flutter	0.025% (wrms)
S/N ratio	Better than 75 dB (DIN B)
Platter weight	2.65 kgs (5.83 Lbs.) Incl. rubber mat, inertia moments 400 kg-cm^2
Platter material	Cast aluminum
Power requirements	U.S.A. & CANADA 120V, 60 Hz., Other areas 220–240V, 50/60 Hz
Power consumption	5W at 120V and 220V
Dimensions	450(W) x 352(D) x 160(H)mm
Weight	12.5 Kgs
Base construction	Consists with 7 Kgs X style frame, made of new material and wooden top cover, finished with virginia hickory (vynil)

* Tonearm

Type	Static balance tonearm with interchangeable pipe system Knife edge style vertical bearing system, made of stainless steel
Effective length	222 mm
Over hang	15 mm
Maximum tracking error	Less than 1.5
Usable cartridge weight	4–9 grams (straight pipe without sub-weight)
Vertical and horizontal sensitivity	25 mg
Range of tracking force adjustment	0–2 g direct reading
Antiskating	Corresponds to stylus pressure
Cuing device	Delay motions for both directions, up and down ward, electro auto-life system.
Maximum rear overhang from the tonearm pivot center	75 mm
Height adjustment range	32.5–47.5 mm (motor board to the center of tonearm tube)

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